



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,552	12/04/2003	Sung-Ho Cho	P56993	5489
7590 09/22/2005			EXAMINER	
Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005			CIRIC, LJILJANA V	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



Art Unit: 3753

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on December 4, 2003 was filed before the mailing date of the first Office action on the merits. The submissions are thus in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

3. The replacement drawings were received on December 4, 2004. These drawings are hereby approved.

### ***Specification***

4. The abstract of the disclosure is objected to because it contains phrases which can be implied (i.e., "Disclosed is"). Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 through 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As written, it is not clear whether the corresponding functional language limitations in base claim 1 (i.e., "sensing a temperature of the chamber" in lines 4-5 of the claim; "controlling the temperature adjuster according to..." in lines 9-12 of the claim] are intended to merely recite the intended use of the first temperature sensor and of the controller or whether these are intended to recite

Art Unit: 3753

method steps in an apparatus claim or whether these are intended to invoke 35 U.S.C. 112, sixth paragraph without using means-plus-function language, for example, thus rendering indefinite the metes and bounds of protection sought by base claim 1 and all claims depending therefrom.

Claims 1 through 16 are also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are, for example: the ones between the at least one chamber and each of the first and second temperature sensors; the ones between the temperature adjuster, the at least one chamber, and the controller; and, the ones between the controller and each of the first sensor and the second sensor.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. As best can be understood in view of the indefiniteness of the claims, claims 1 through 5, 7 through 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Woo (made of record by applicant via the information disclosure statement).

Woo discloses a refrigerator essentially as claimed, including at least one chamber 3A, a first temperature sensor SEN 2 and a second temperature sensor SEN 1, a temperature adjuster including a refrigeration system and a heater 9, and controller as depicted schematically in Figure 7.

The reference thus reads on the claims.

***Allowable Subject Matter***

Art Unit: 3753


9. Claims 6, 13, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene, can be reached at 571-272-4930.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ljiljana (Lil) V. Ciric  
Primary Examiner  
Art Unit 3753